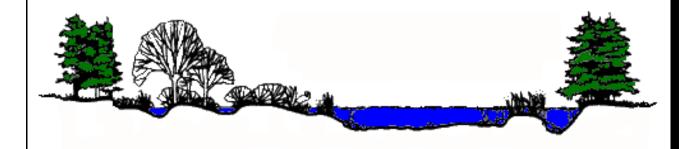
Draft Memorandum of Agreement

Establishment of a New York State Department of Transportation Wetland Mitigation Bank



Mitigation Bank Review Team:

United States Army Corps of Engineers, Buffalo District
United States Environmental Protection Agency, Region 2
United States Fish and Wildlife Service, Cortland Field Office
New York State Department of Environmental Conservation, Region 8
New York State Department of Transportation, Region 4
Federal Highway Administration, New York Division

Memorandum of Agreement Establishment of a New York State Department of Transportation Wetland Mitigation Bank PIN 4804.87.101

This Memorandum of Agreement (MOA) regarding the establishment, use, operation and maintenance of a New York State Department of Transportation Wetland Mitigation Bank (hereinafter, the Bank) is made and entered into by and among the New York State Department of Transportation, the New York State Department of Environmental Conservation, the United States Army Corps of Engineers, the United States Environmental Protection Agency, the United States Fish and Wildlife Service, and the Federal Highway Administration with reference to the following:

SECTION I. PREAMBLE

WHEREAS, the purpose of this MOA is to establish guidelines and responsibilities for the establishment, use, operation and maintenance of the Bank.

WHEREAS, the Bank will be used for compensatory mitigation for unavoidable impacts to waters of the United States (including wetlands) which result from activities authorized under Section 404 of the Clean Water Act, Section 401 of the Clean Water Act, Section 9 of the Rivers and Harbors Act and Section 10 of the Rivers and Harbors Act, provided such use has met all applicable requirements and is authorized by the appropriate authority.

WHEREAS, the Bank may be used for compensatory mitigation for unavoidable wetland impacts resulting from activities authorized under Article 24 of New York State Environmental Conservation Law, provided such use has met all applicable requirements and complies with existing state and federal wetland banking laws and policies, and is consistent with existing New York State Department of Environmental Conservation Guidelines on Compensatory Mitigation.

WHEREAS, an interagency Mitigation Bank Review Team (MBRT) will be established and comprised of representatives from the following agencies:

- 1. United States Army Corps of Engineers, Buffalo District (Corps), MBRT Chair.
- 2. United States Environmental Protection Agency, Region 2 (EPA).
- 3. United States Fish and Wildlife Service, Cortland Field Office (FWS).
- 4. New York State Department of Environmental Conservation, Region 8 (DEC).
- 5. New York State Department of Transportation, Region 4 (DOT).
- 6. Federal Highway Administration, New York Division (FHWA).

WHEREAS, establishment of the Bank will offer many ecological and economic benefits for all agencies represented on the MBRT. These benefits include:

- 1. An increased efficiency in permit review, issuance and compliance monitoring.
- 2. A greater economy of scale at all project phases (planning, design, construction and operation).

- 3. Elimination of the "double permit" process where a permit may be needed for both the transportation project and for the wetland mitigation project.
- 4. Consolidation of a series of scattered mitigation efforts into a single, integrated ecosystem situated away from the highway environment.
- 5. A higher degree of ecological success since the Bank will involve wetland restoration rather than creation on an upland site.
- 6. Long-term preservation of the Bank since it will be owned and managed by the DEC.
- 7. Enhancement of the environmentally-sensitive Northern Montezuma wetland complex, which is inhabited by many rare and protected species of flora and fauna.
- 8. The Bank will help advance the overall goals of the North American Waterfowl Management Plan and the management plan developed for the Northern Montezuma Wildlife Management Area.

WHEREAS, the overall project goal is to establish a Bank consisting of approximately 45 acres of high quality, shallow water emergent wetland.

WHEREAS, the Bank will be located on a DEC-owned land parcel within the Northern Montezuma Wildlife Management Area. A second land parcel will be restored to wetland for the DEC as compensation for use of its land, but this parcel will not be part of the Bank (hereinafter, Parcel Two). Refer to Exhibit A for a Bank Location Map.

The Bank parcel (Tax Map Number 046.111-00-448.816) is a 214.19 acre property located at the east end of Morgan Road in the Town of Savannah, Wayne County. Approximately 45 acres of this parcel will be restored to shallow water emergent wetland.

Parcel Two (Tax Map Number 045.112-00-115.382) is a 48.6 acre parcel located southeast of the Route 89 bridge over Crusoe Creek in the Town of Savannah, Wayne County. Approximately 27 acres of this parcel will be restored to shallow water emergent wetland, but this parcel will not be part of the Bank.

WHEREAS, the Bank parcel was historically natural wetland, but for many years the land was artificially-drained for agriculture. The Bank parcel does not presently exhibit wetland characteristics, having been actively farmed through the fall of 2002. The Bank parcel is dominated by Martisco Muck, a hydric soil with a Histic Humaquepts soil taxonomy classification.

WHEREAS, upon satisfaction of the performance criteria contained herein, a total of 45 acre credits will be available for use as compensatory mitigation by the DOT in accordance with all applicable requirements.

WHEREAS, the DOT has obligated sufficient funds in its capital program to establish the Bank, and these funds will be transferred to the DEC, who will construct, monitor, maintain and manage the Bank in accordance with this MOA.

WHEREAS, this MOA does not in any manner affect statutory authorities and responsibilities of the signatory parties.

WHEREAS, the establishment, use, operation and maintenance of the Bank will be carried out in accordance with the following regulations, policies and guidelines:

- 1. Clean Water Act (33 USC 1251 et seq.).
- 2. Rivers and Harbors Act (33 USC 403).
- 3. Fish and Wildlife Coordination Act (16 USC 661 et seq.).
- 4. Regulatory Programs of the Corps of Engineers, Final Rule (33 CFR Parts 320-330).
- 5. New York State Freshwater Wetlands Act (Title 6 NYCRR, Parts 663, 664 and 665).
- 6. DEC Freshwater Wetlands Regulation, Guidelines on Compensatory Mitigation.
- 7. Presidential Executive Order 11990, Protection of Wetlands.
- 8. Guidelines for Specification of Disposal Sites for Dredged & Fill Material (40 CFR Part 230).
- 9. Memorandum of Agreement between EPA and Corps concerning the Determination of Mitigation Under the Clean Water Act, Section 404(b)(1) Guidelines (February 6, 1990).
- 10. Federal Guidance for the Establishment, Use and Operation of Mitigation Banks (Federal Register 58605 November 28, 1995).
- 11. FHWA Mitigation of Impacts to Wetlands and Natural Habitats (23 CFR Part 777).
- 12. Transportation Equity Act for the 21st Century (TEA 21).

WHEREAS, the following exhibits are incorporated into this MOA:

Exhibit A	Wetland Mitigation Bank - Location Map.		
Exhibit B	Wetland Mitigation Bank - Geographic Service Area Map.		
Exhibit C	Wetland Mitigation Bank - Sample Debit Certificate.		
Exhibit D	Wetland Mitigation Bank - Sample Annual Credit Usage Statement.		
Exhibit E	Wetland Mitigation Bank - Design Plans.		
Exhibit F	DEC Wetland Restoration Monitoring Protocol for Northern Montezuma		
	Wetlands.		

NOW, THEREFORE, the signatory parties agree to the following:

SECTION II. ESTABLISHMENT OF THE BANK

- **A. Design.** The DOT has designed the wetland restoration plan for the Bank with assistance from the DEC. Refer to Exhibit E for the Wetland Mitigation Bank Design Plans.
- **B.** Construction. The DEC, using funds provided by the DOT, will construct the Bank. Construction work will be performed by a contractor currently retained by the DEC under a five year term agreement. The DEC will field inspect all construction activities to assure compliance with the design plans and the MOA. Staff from the DOT will periodically monitor construction activities and will complete a detailed inspection of all construction work before acceptance.
- **C. Functions.** The primary function of the Bank will be to provide seasonal and year-round habitat for a diverse assemblage of flora and fauna, including resident, transient and migratory birds, amphibians, reptiles and mammals. Secondary functions of the Bank will be to provide open space, passive recreational opportunities (such as bird watching), research opportunities, flood desynchronization and groundwater recharge.

- **D. Hydrology.** Impounded surface water and a prolonged high water table will be the primary sources of hydrology at the Bank. Water levels will be managed using earth berms and water control structures. However, the Bank is contiguous to the Seneca River and water may periodically be pumped into or out of the Bank using two electric pumps that are already located on the parcel. The pumps were occasionally used to manage water levels on the site during agricultural operations. The Bank wetland will include an irregular bottom surface, hummocks and varying water depths (generally ranging from twelve to thirty-six inches).
- **E. Permits, Certifications and Authorizations.** The DOT will obtain all applicable environmental permits, certifications, or other authorizations needed to establish the Bank. This MOA does not fulfill or substitute for such authorizations.
- **F. Bank Modifications.** The Bank will be established as shown in the Wetland Mitigation Bank Design Plans (Exhibit E). If the DOT determines the design plans require modification to ensure successful establishment of the Bank, the DOT shall submit a written request for such modification to the MBRT for approval.
- **G. Financial Assurances.** The DOT has obligated state dedicated highway funds in its capital program for establishment of the Bank (and Parcel Two). The DOT will transfer these funds via journal voucher to the DEC, who will construct, monitor and perform any necessary maintenance/remedial actions in the Bank. Funds will be provided to the DEC on a per-acre basis.

The figures listed below represent the maximum financial contribution to be provided by the DOT for establishment of the Bank (and Parcel Two). In the event the construction, monitoring and remedial costs exceed this contribution, the DEC will be wholly responsible for the additional costs.

TOTAL DOT FUNDS TO BE TRANSFERRED TO DEC

(Dollar figures are based on the restoration of 72 acres of wetland on two land parcels, with the DOT receiving 45 acre credits)

Activity to be performed by DEC	DOT Per Acre Contribution	Total DOT Contribution
Wetland Restoration/Construction Activities	\$1900	\$136,800
Wetland Monitoring Activities	\$400	\$28,800
Wetland Maintenance/Remedial Actions	\$200	\$14,400
TOTAL DOT FUNDS TO BE TRANSFERRED TO	\$180,000	

H. Real Estate Provisions. The DEC currently owns and will continue to own the Bank parcel. The DEC will manage the Bank as part of the Northern Montezuma Wildlife Management Area, thus ensuring the Bank will remain wetland in perpetuity.

SECTION III. OPERATION OF THE BANK

- **A. Bank Service Area.** The service area of the Bank will include Wayne, Monroe, Ontario and Livingston Counties. Refer to Exhibit B for a map of the geographic service area of the Bank. The MBRT may, on a case-by-case basis, allow the DOT to utilize the Bank to mitigate for wetland impacts occurring outside of the defined service area.
- **B.** Eligible Projects. Any DOT transportation project within Wayne, Monroe, Ontario or Livingston Counties may be eligible to use the Bank to satisfy compensatory mitigation requirements, but only after appropriate avoidance and minimization efforts have occurred and on-site mitigation has been determined not to be ecologically or economically feasible.
- C. Bank Access. The DOT and DEC will allow access to the Bank by all signatory parties for the purpose of inspection and compliance monitoring consistent with the terms and conditions of this MOA. Inspecting parties shall provide the DOT and DEC with at least 24 hours notice prior to inspection of the Bank.
- **D.** Uses of the Bank. The Bank will be used for conservation, limited passive recreation and limited research, all of which are consistent with the management plan developed for the Northern Montezuma Wildlife Management Area. Furthermore, the DOT and DEC will not grant easements, rights-of-way, or any other property interest in or to the Bank without written consent of the MBRT.
- **E.** Credit and Debit Assessment Methodology. One mitigation acre credit shall be equivalent to one acre of restored wetland. The Bank will restore 45 acres of wetland habitat and will therefore have 45 acre credits available for use. Unless the regulatory agencies determine a greater credit deduction ratio is warranted for a specific project, two acre credits will be deducted from the Bank for each acre of actual wetland loss. The use of fractional credits will be allowed. The same acre credit will be used for an activity which requires approval by more than one agency. However, once a credit has been approved for use on a specific project, it cannot be used on additional projects (e.g. the same acre credit cannot be used to mitigate federal wetland impacts on one project and state wetland impacts on another project).
- **F. Performance Criteria.** The DEC Wetland Restoration Monitoring Protocol for Northern Montezuma Wetlands will be used to evaluate Bank performance. The following performance criteria will be used to determine the success of the Bank and to determine the availability of acre credits:

Year One Performance Criteria

- 1. Earthwork/grading in the Bank is fully completed.
- 2. Hydrology is established in the Bank.

Year Two Performance Criteria

- 1. Establishment of a wetland plant community with more than 50 percent of the plant species having an indicator status of facultative, facultative-wet or obligate.
- 2. Establishment of shallow water emergent wetland with an average water depth of eighteen inches (during April, May and June) and submerged islands and an irregular bottom surface.

- 3. Establishment of viable habitat for a variety of wetland-associated wildlife, including avian, reptile and amphibian species.
- 4. Undesirable invasive plant species (purple loosestrife and phragmites) cover less than 50 percent of the wetland surface area.

Year Three Performance Criteria

- 1. Establishment of a wetland plant community with more than 50 percent of the plant species having an indicator status of facultative, facultative-wet or obligate.
- 2. Establishment of shallow water emergent wetland with an average water depth of eighteen inches (during April, May and June) and submerged islands and an irregular bottom surface.
- 3. Establishment of viable habitat for a variety of wetland-associated wildlife, including avian, reptile and amphibian species.
- 4. Undesirable invasive plant species (purple loosestrife and phragmites) cover less than 40 percent of the wetland surface area.

Year Four Performance Criteria

- 1. Establishment of a wetland plant community with more than 50 percent of the plant species having an indicator status of facultative, facultative-wet or obligate.
- 2. Establishment of shallow water emergent wetland with an average water depth of eighteen inches (during April, May and June) and submerged islands and an irregular bottom surface.
- 3. Establishment of viable habitat for a variety of wetland-associated wildlife, including avian, reptile and amphibian species.
- 4. Undesirable invasive plant species (purple loosestrife and phragmites) cover less than 30 percent of the wetland surface area.

Year Five Performance Criteria

- 1. Establishment of a wetland plant community with more than 50 percent of the plant species having an indicator status of facultative, facultative-wet or obligate.
- 2. Establishment of shallow water emergent wetland with an average water depth of eighteen inches (during April, May and June) and submerged islands and an irregular bottom surface.
- 3. Establishment of viable habitat for a variety of wetland-associated wildlife, including avian, reptile and amphibian species.
- 4. Undesirable invasive plant species (purple loosestrife and phragmites) cover less than 20 percent of the wetland surface area.
- **G. Schedule of Credit Availability.** The DOT will receive a total of 45 mitigation acre credits for its wetland restoration efforts. Acre credits will become available for use by the DOT in accordance with the following schedule:

Credit Release One. The DOT will receive 15 acre credits after successful achievement of Year One performance criteria.

Credit Release Two. The DOT will receive another 15 acre credits after successful achievement of Year Two performance criteria.

Credit Release Three. The DOT will receive the final 15 acre credits after successful achievement of Year Five performance criteria.

Acre credits will not be available for use if the performance criteria are not met. Credit release will occur after remedial measures are performed and the performance criteria are met and approved by the MBRT.

SECTION IV. MONITORING, MAINTENANCE AND MANAGEMENT OF THE BANK

A. Monitoring Provisions. Monitoring will be performed by the DEC, using funds provided by the DOT. The duration of monitoring will be five consecutive years, beginning with the year the Bank is constructed. However, if it is determined at the conclusion of the five year monitoring period that there are outstanding maintenance/remedial issues, the MBRT may require monitoring to continue until the outstanding maintenance/remedial issues are satisfactorily resolved.

The DEC will monitor the Bank during Year One simply to determine whether Year One performance criteria were achieved. Findings will be documented in a very brief monitoring report that will be provided to each agency represented on the MBRT.

The DEC will monitor the Bank during Year Two, Year Three and Year Four using its Wetland Restoration Monitoring Protocol for Northern Montezuma Wetlands - *Routine Assessment Methodology* (Exhibit F). Monitoring will also include an inventory of undesirable invasive plant species (purple loosestrife and phragmites). Wetland hydrology will be characterized by measuring surface water depths a minimum of once per month (during April, May and June). Findings will be documented in brief annual monitoring reports that will be provided to each agency represented on the MBRT.

The DEC will monitor the Bank during Year Five using its Wetland Restoration Monitoring Protocol for Northern Montezuma Wetlands - *Comprehensive Assessment Methodology* (Exhibit F). Monitoring will also include an inventory of undesirable invasive plant species (purple loosestrife and phragmites). Wetland hydrology will be characterized by measuring surface water depths a minimum of once per month (during April, May and June). Findings will be documented in a detailed monitoring report that will be provided to each agency represented on the MBRT.

B. Monitoring Reports. The DEC will prepare all monitoring reports and will provide two copies to each agency represented on the MBRT. Reports will be submitted on or before December 1st of each monitoring year.

Year One monitoring report will contain the following information:

- 1. Narrative summarizing the condition of the Bank.
- 2. Description of the performance criteria and a determination as to whether the performance criteria were successfully achieved.
- 3. Description of maintenance/remedial actions that should be performed.
- 4. Site maps and photographs.

Year Two, Year Three and Year Four monitoring reports will contain the following information:

- 1. Narrative summarizing the overall condition of the Bank.
- 2. Overview of the Routine Assessment Methodology.
- 3. Species richness and relative abundance of avian and amphibian species.
- 4. Habitat characteristics including area of plant and water cover, plant species composition, and vegetative community types.

- 5. Changes in habitat characteristics.
- 6. Changes in avian and amphibian species composition and abundance.
- 7. Inventory of undesirable invasive plant species (purple loosestrife and phragmites) and map showing locations.
- 8. Measured surface water depths.
- 9. Description of the performance criteria and a determination as to whether the performance criteria were successfully achieved.
- 10. Description of maintenance/remedial actions that should be performed.
- 11. Site maps (including location of sampling plots, photo points, transects), photographs and field data forms.

Year Five monitoring report will contain the following information:

- 1. Narrative summarizing the overall condition of the Bank.
- 2. Overview of the Comprehensive Assessment Methodology.
- 3. Species richness and relative abundance of avian, reptile, amphibian and plant species.
- 4. Habitat characteristics including area of plant and water cover, plant species composition, and vegetative community types.
- 5. Changes in habitat characteristics.
- 6. Changes in avian, reptile and amphibian species composition and abundance.
- 7. Inventory of undesirable invasive plant species (purple loosestrife and phragmites) and map showing locations.
- 8. Measured surface water depths.
- 9. Description of the performance criteria and a determination as to whether the performance criteria were successfully achieved.
- 10. Description of maintenance/remedial actions that should be performed.
- 11. Site maps (including location of sampling plots, photo points, transects), photographs and field data forms.
- C. Accounting Procedures. Unless the regulatory agencies determine a greater credit deduction ratio is warranted for a specific project, the DOT will deduct two acre credits from the Bank for each acre of actual wetland loss. The use of fractional credits will be allowed. The same acre credit will be used for an activity which requires approval by more than one agency. However, once a credit has been approved for use on a specific project, it cannot be used on additional projects (e.g. the same acre credit cannot be used to mitigate federal wetland impacts on one project and state wetland impacts on another project).

The debit process for transportation projects requiring individual permits, programmatic permits requiring submission of an application, or nationwide permits requiring pre-construction notification will be as follows:

- 1. The DOT will submit a permit application to the appropriate regulatory agencies documenting its wetland avoidance and minimization efforts and its proposed compensatory mitigation plan -- on-site mitigation, use of banked credits, or a combination of credits and on-site mitigation.
- 2. The DOT permit application will also document the wetland functions that will be impacted by the transportation project, which of these functions will be engineered/mitigated on-site (e.g. water quality and flood storage functions), and which functions will be mitigated through use of the Bank (e.g. wildlife/habitat, open space and passive recreation functions).

- 3. If credits are proposed to be utilized, regulatory approval of the permit application will signify permission to use the Bank for compensatory mitigation. The appropriate number of acre credits will then be deducted from the Bank.
- 4. Upon receipt of the approved permit, the DOT will issue a *Bank Debit Certificate* to the appropriate regulatory agencies certifying use of the Bank. This certificate will be for record keeping purposes only no action by the regulatory agencies will be required. Refer to Exhibit C for a sample *Bank Debit Certificate*.
- 5. If the use of Bank credits is deemed unacceptable, the regulatory agencies shall provide the DOT with a letter denying the use of credits within 30 calendar days after completion of the public notification process, except for good cause. The letter of denial shall detail why the use of Bank credits was deemed unacceptable.
- **D.** Annual Credit Usage Statements. The DOT will document the use of all wetland acre credits, and will submit an *Annual Credit Usage Statement* to the members of the MBRT by December 31st of each calendar year the Bank is active. The statement will include an itemized listing of the wetland bank credits used during the calendar year. Refer to Exhibit D for a sample *Annual Credit Usage Statement*.
- **E. Maintenance/Remedial Actions.** The DEC, using funds provided by the DOT, will perform all maintenance/remedial actions that may be necessary during the five year monitoring period to ensure Bank success. The DEC, as part of its long-term management of the Northern Montezuma complex, will perform and wholly fund any maintenance/remedial actions that may be required in the Bank after the five year monitoring period expires.
- **F.** Long Term Management. The DEC will manage the Bank as part of the Northern Montezuma Wildlife Management Area upon completion of wetland construction activities. It is anticipated that the Bank will be self-sustaining and will require little long-term maintenance or extensive management activities.

SECTION V. RESPONSIBILITIES OF THE MBRT

The agencies represented on the MBRT will provide appropriate oversight in carrying out the provisions of this MOA. The MBRT will be chaired by the COE.

The agencies represented on the MBRT will review and provide comments on all project plans, monitoring reports, remedial action plans, and permit applications for the Bank within 30 calendar days from the date of complete submittal, except for good cause.

The agencies represented on the MBRT may conduct compliance inspections, as necessary, to verify credits available in the Bank or to identify corrective measures that may be necessary. Compliance inspections may be performed during the five year monitoring period or until all credits have been used, whichever is later.

SECTION VI. OTHER PROVISIONS

- **A. Force Majeure.** The DOT and/or DEC will not be held responsible for failure of the Bank that is attributed to natural catastrophes (such as flood, drought, disease, regional pest infestations) that the MBRT determines is beyond the control of the DOT and/or DEC to prevent or mitigate.
- **B. Dispute Resolution.** Any disputes related to this MOA shall be resolved in accordance with the dispute resolution provisions within the Federal Guidance for the Establishment, Use and Operation of Mitigation Banks (Federal Register 58605, November 28, 1995).
- C. Validity, Modification and Termination of the MOA. This MOA will become valid on the date of the last signatory's signature. This MOA may be amended or modified at any time with written approval of all signatory parties. Any member of the MBRT may terminate their participation in this MOA upon written notification to all signatory parties. Participation will cease 45 calendar days after issuance of the written termination notice.
- **D.** MOA Language Shall be Controlling. To the extent that specific language in this document changes, modifies or deletes terms and conditions contained in those documents that are incorporated into the MOA by reference, and that are not legally binding, the specific language within the MOA shall be controlling.

U.S. Army Corps of Engineers, Buffalo District	Date
U.S. Environmental Protection Agency, Region 2	Date
U.S. Fish and Wildlife Service, Cortland Field Office	Date
N.Y.S. Department of Environmental Conservation	Date
N.Y.S. Department of Transportation, Region 4	Date
Federal Highway Administration, New York Division	Date